

REMARKS

Applicants respectfully request further examination and reconsideration in view of the instant response. Claims 1-19 remain pending in the case. Claims 1-20 are rejected. Claim 20 is cancelled herein without prejudice. Claims 1, 8 and 15 are amended herein. No new matter has been added.

ALLOWABLE SUBJECT MATTER

Applicants wish to thank the Examiner for the indication that Claim 18 would be allowable if rewritten in independent form including the limitations of their base Claims and any intervening Claims and if Claim 18 overcomes the rejection under 35 U.S.C. § 112, second paragraph.

SPECIFICATION

The disclosure is objected to because of two informalities. In particular, the disclosure is objected to because of an inconsistency between the term MAD being referred to as both "mean average deviation" and "mean absolute deviation." Applicants have amended the specification herein to replace the term "mean average deviation" with "mean absolute deviation." No new matter has been added.

The disclosure is also objected to as Examiner asserts that a preliminary examination of the application reveals that it includes terminology which is so different from that which is generally accepted in the art to which the

invention pertains that a proper search of the prior art cannot be made.

Examiner cites the terms "activity" and "activity metric" as such terminology. As support, Examiner cites United States Patent Number 6,636,762 by Balasubramanian et al, hereinafter referred to as the "Bala" reference and United States Patent Number 6,504,873 by Vehvilainen et al, hereinafter referred to as the "Vehvilainen" reference.

Applicants respectfully assert that neither Bala nor Vehvilainen teach that a high activity metric must include an edge parameter. Rather, Applicants understand that a high activity measure indicates the amount of variation within a block. In other words, a high activity measure may indicate a high level of variation within pixels of a block other than an edge parameter.

Applicants respectfully assert that the generally accepted art does not require that high activity or a high activity metric of a block must indicate an edge parameter. As described above, while a high activity metric may indicate an edge parameter, it is not necessarily an edge parameter.

35 U.S.C. §112, second paragraph

Claims 1-19 are rejected under 35 U.S.C. § 112, second paragraph, as these claims are indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically,

Examiner asserts that Applicants have acted as their own lexicographer in defining the term "activity metric" as not including an edge parameter.

Applicants have amended Claims 1 and 8 herein to recite the limitation of "an activity metric not indicating an edge parameter." Similarly, Claim 15 recites the limitation of "when the level of variation is not in the predetermined relationship with the predetermined level of variation, generating a measure of an edge parameter." Accordingly, Applicants respectfully assert that the claimed activity metric (e.g., level of variation) does not redefine an activity metric as not including an edge parameter, but rather that the activity metric does not indicate an edge parameter. Support for this amendment is found in the present specification as page 12, line 14 through page 13, line 8. Therefore, Applicants respectfully assert that amended Claims 1-19 overcome the rejection under 35 U.S.C. § 112, second paragraph.

35 U.S.C. §102(e)

Claims 1-17 and 19 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Bala. Applicants have reviewed the cited reference and respectfully submit that the present invention as recited in Claims 1-17 and 19 is not rendered obvious by Bala.

Applicants respectfully direct the Examiner to independent Claim 1 that recites that an embodiment of the present invention is directed to (emphasis added):

An image processing system comprising:
a filter selection mechanism for receiving an input pixel window and responsive thereto for generating a filter identifier based on one of an edge parameter computed based on the input pixel window and an activity metric not indicating an edge parameter computed based on the input pixel window, wherein a combination of both the edge parameter and the activity metric is not required for the generating of the filter identifier; and
a filter application unit coupled to the filter selection mechanism for receiving the filter identifier and applying a filter identified by the filter identifier to the input pixel window to generate an output pixel.

Independent Claims 8 and 15 recite similar limitations. Claims 2-7 that depend from independent Claim 1, Claims 9-14 that depend from independent Claim 8, and Claims 16, 17 and 19 that depend from independent Claim 15 provide further recitations of the features of the present invention.

Applicants respectfully submit that Bala and the claimed embodiments are very different. Applicants understand Bala to teach a gamut mapping process for preserving local luminance differences. Bala teaches that different filters meant to filter different size areas can be applied to different size areas. In particular, Bala teaches that activity levels for different size areas is computed in selecting a filter.

Applicants respectfully assert that Bala does not teach, describe or suggest “generating a filter identifier based on one of an edge parameter computed based on the input pixel window and an activity metric not indicating an edge parameter computed based on the input pixel window” as claimed (emphasis added). With reference to Figures 6 and 10, Applicants understand Bala to teach a filtering function that may be implemented at a metric function 400 that applies its output to filter selector 302 to select an appropriate filter for spatial filter 104 (col. 7, lines 60-63). A small area activity metric is calculated for a small area (e.g., 5x5) and a large area activity metric is calculated for a large area (e.g., 15x15) (col. 7, lines 64 through col. 8, line 8). In particular, the small activity metric and the large activity metric are calculated based on different size areas. In other words, Applicants respectfully assert that the small activity metric and the large activity metric are calculated based on different input windows.

In contrast, embodiments of the claimed invention as recited in Claim 1 recite the limitation of “generating a filter identifier based on one of an edge parameter computed based on the input pixel window and an activity metric not indicating an edge parameter computed based on the input pixel window” (emphasis added). In particular, the claimed embodiment provides for computing an edge parameter and an activity metric where both are “computed based on the input pixel window” as claimed (emphasis added). Accordingly,

the claimed embodiment provides for computing an edge parameter and an activity metric use the same input window.

Applicants respectfully assert that Bala does not teach, describe or suggest "generating a filter identifier based on one of an edge parameter computed based on the input pixel window and an activity metric not indicating an edge parameter computed based on the input pixel window" as recited in independent Claims 1 and 8. In contrast, Bala teaches calculating different activity metrics based on different input windows. By explicitly teaching that the activity metrics are calculated based on different input windows of different sizes, Bala teaches away from the claimed configuration.

In view of the claim limitations not being shown or suggested in Bala, in combination with the above arguments, Applicants respectfully submit that independent Claims 1, 8 and 15 overcome the cited reference and are therefore allowable over Bala. Therefore, Applicants respectfully submit that Bala also does not teach or suggest the additional claimed features of the present invention as recited in Claims 2-7 that depend from independent Claim 1, Claims 9-14 that depend from independent Claim 8, and Claims 16, 17 and 19 that depend from independent Claim 15. Applicants respectfully submit that Claims 2-7, 9-14, 16, 17 and 19 also overcome the rejection under 35 U.S.C. § 103(a) as these claims are dependent on allowable base claims.

CONCLUSION

Based on the arguments presented above, Applicants respectfully assert that Claims 1-19 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these Claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,
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